

QUALITY OF SERVICE FUNCTIONS IMPLEMENTED IN INPUT INTERFACE CIRCUIT INTERFACE DEVICES IN COMPUTER NETWORK HARDWARE

ABSTRACT

The decision to discard or forward a packet is made by a flow control mechanism,
5 upstream from the forwarding engine in the node of a communication network. The forwarding
engine includes a switch with mechanism to detect congestion in the switch and return a binary
signal B indicating congestion or no congestion. The flow control mechanism uses B and other
network related information to generate a probability transmission table against which received
packets are tested to determine proactively whether a packet is to be discarded or forwarded.